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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/066,594	02/06/2002	Toru Hanada	Q68451	8377

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EXAMINER

CHOWDHURY, TARIFUR RASHID

ART UNIT

PAPER NUMBER

2871

DATE MAILED: 02/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/066,594

Applicant(s)

HANADA ET AL.

Examiner

Tarifur R Chowdhury

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27 and 28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27, 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Status of the Claims

1. Currently claims 27 and 28 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. **Claims 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daecher et al., (Daecher), USPAT 6,183,829.**

5. Daecher discloses a transparent polymer substrate (col. 1, lines 6-16) which comprises a polycarbonate resin having a bisphenol component

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comprising 9,9-bis(4-hydroxy-3-methylphenyl)fluorine bisphenol (col. 14, lines 29, 36-37, 47).

Even though Daecher is silent about the property such as water absorption coefficient of the polymer substrate being 0.7% or less, since the substrate disclosed by Daecher is made of a same material as claimed, the limitation is either inherent or would have been obvious (see MPEP 2112).

As to the limitation such as "formed by a solvent casting method" is considered as a process limitation in a product claim. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) (MPEP 2113). Therefore, since the product (the substrate) in the product-by-process claim is the same as the product (substrate) of Daecher, the claim is unpatentable even though the substrate of Daecher was made by a different process. Furthermore, it should also be noted that common and known method of forming substrates include solvent casting method, compression molding method, extrusion calendaring method, press-polishing method or annealing method etc.

Further, as to the limitation of the substrate having a total light transmittance of 80% or more, since the polymer substrate described in Daecher

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is made of the same material as claimed, one of ordinary skill in the art would expect the substrate to have a light transmittance of more than 80%.

Furthermore, it is common and known in the liquid crystal art to have substrates that have light transmittance as high as possible (preferably 90%) because it will help to achieve a brighter display. Therefore, it would have at least been obvious to one of ordinary skill in the art at the time of the invention was made to have a substrate that has a light transmittance of more than 80% so that a brighter display is obtained.

As to claim 28, Daecher also discloses the polycarbonate resin is a copolymer having 9,9-bis(4-hydroxy-3-methylphenyl)fluorine bisphenol and bisphenol A as bisphenol components (col. 14, lines 29, 36-37, 47, 65).

Even though, Daecher is silent about the bisphenol A being present in an amount of 10-90 mol%, it is known that whenever there is a mixture of materials the amount of one material is between 0-100% which overlaps the claimed range at 10-90%.

Response to Arguments

6. Applicant's arguments filed 11/25/02 have been fully considered but they are not persuasive.

In response to applicant's argument that Daecher does not disclose a substrate which has a total light transmittance of 80% or more and which is formed by a solvent casting method, applicant's attention is respectfully requested to the explanation above wherein the examiner explained that it is common and known in the art of liquid crystal to use a substrate that has high

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light transmittance since it provides brighter display. Further, since the substrate of Daecher is made of the same material as in the instant invention one of ordinary skill in the art would expect the substrate to have a light transmittance of more than 80%. Further, the examiner also explained above that the limitation such as the substrate being formed by a "solvent casting" method is considered as a process limitation in a product claim and thus claim is unpatentable even though the product of Daecher was made by a different process.

Further, it should be noted that applicant has not in any way argued or showed that the position taken by the examiner regarding claim 18 and the limitation such as the substrate having a water absorption coefficient of 0.7% or less are in error and thus it appears that the applicant has acquiesced.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will

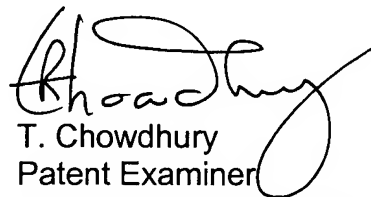
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the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tarifur R Chowdhury whose telephone number is (703) 308-4115. The examiner can normally be reached on M-Th (6:30-5:00) Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William L Sikes can be reached on (703) 305-4842. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7005 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.


T. Chowdhury
Patent Examiner
Technology Center 2800

TRC
February 12, 2003